**Roland Owens** 

**TIDEWATER** 

(804) 693-3562, x 5

# Conservation Plan Report

#### **Producer Information:**

Monster Dairy, Cookie C Monster

Monster Dairy 123 Main Street Mathews, VA 23109

## **Short Version**

## **Description of Operation**

The operation consists of a combination of small grain and beef production. The entire planned portion of the operation is within Mathews County in the Chesapeake Bay watershed. Of the 50.4 acres, 18 acres are crop fields and 32.4 are pasture. Both fields are adjacent to Godfrey Bay off of the Piankatank River.

## Objective

The producer states that he would like to address soil loss on crop fields and to fence cattle out of the perennial stream.

# Plan developed to meet the following program requirements:

(Insert legal statement about meeting program requirements)
Select all that apply:

Technical Assistance Only
X CBPA
X VACS cost-share
VACS tax credit
DEQ funds
Land Conservation Tax Credit
Agriculture Stewardship Act

## **Assessment Summary**

An onsite assessment indicated that while soil loss was not a major concern, soil loss and nutrient loss on crop fields could be reduced through the implementation of a small grain cover crop included in the rotation. The producer is currently implementing no-till planting practices, which should be maintained to keep soil loss to a minimum.

Currently, cattle have access to a perennial stream, Moot Creek, which runs through the middle of the pasture. The situation has created stream bank erosion concerns and is a water quality concern. The installation of an SL-6 practice would address this issue.

The existing buffer along the river is not adequate to prevent further erosion. Increased buffer width could address this concern.

## **Recommended BMPs**

#### SL-8B: Small Grain cover crop for Nutrient Management

**Instance ID: 205279** 

#### **Description**:

Cost-share and tax credit are provided to establish vegetative cover on cropland for protection from erosion and the reduction of nutrient losses to groundwater. Producer plans to plant a rye cover crop meeting the early planting date.

#### Purpose:

This practice will provide an incentive to keep a cover on cropland, which will help prevent the loss of nutrients. The purpose is to reduce erosion and the leaching of nutrients to ground water. This BMP is designed to utilize the maximum amount of residual nitrogen from previous surface nutrient applications and in the first three feet of the soil profile. Due to the proximity of surface waters cover crops on these specific fields are especially important.

#### Components (3)

| Туре       | Ground<br>Disturbing | Computed    | Actual     |
|------------|----------------------|-------------|------------|
| Cover Crop | No                   | 11.69 acres | 11.7 acres |

#### Narrative:

Close-growing grasses, legumes, or small grain will be grown for seasonal protection, soil improvement and nutrient management. Tetraploid Rye is being used for maximum nitrogen uptake in Field 1.

| Туре       | Ground<br>Disturbing | Computed   | Actual    |
|------------|----------------------|------------|-----------|
| Cover Crop | No                   | 3.34 acres | 3.4 acres |

#### Narrative:

Close-growing grasses, legumes, or small grain will be grown for seasonal protection, soil improvement and nutrient management. Tetraploid Rye is being used for maximum nitrogen uptake in Field 2.

| Туре       | Ground<br>Disturbing | Computed   | Actual    |
|------------|----------------------|------------|-----------|
| Cover Crop | No                   | 3.87 acres | 3.9 acres |

#### Narrative:

Close-growing grasses, legumes, or small grain will be grown for seasonal protection, soil improvement and nutrient management. Tetraploid Rye is being used for maximum nitrogen uptake Field 3.

## **Recommended BMPs**

#### SL-6: Stream Exclusion With Grazing Land Management

Instance ID: 205280

#### **Description**:

A structural and/or management practice that will enhance or protect vegetative cover to reduce runoff of sediment and nutrients from existing pastureland and reduce NPS pollution associated with grazing livestock. Existing historic buffer was only 20' so the producer decided to expand the buffer an additional 50'. Two section fence (approx, 3900' total), a stream crossing, one well, two watering troughs and approx. 1500' of pipeline will be installed.

#### Purpose:

Provide livestock water systems, fencing and/or a hardened pad for winter-feeding that will improve water quality by establishing rotational grazing to control erosion and eliminate direct access to or a direct runoff input to live streams where there is a defined water quality problem. Stream exclusion fencing is a required component of this practice. The system receiving cost share should reflect the least cost, technically feasible, environmentally effective approach to resolve the existing water quality problem.

#### Components (9)

| Туре                      | Ground<br>Disturbing | Computed   | Actual     |  |
|---------------------------|----------------------|------------|------------|--|
| Riparian Herbaceous Cover | No                   | 2.51 acres | 2.51 acres |  |

#### Narrative:

Riparian herbaceous cover consist of grasses, grass-like plants, and forbs comprising the ecosystems along riparian areas of water courses or at the fringe of water bodies. This provides 35' of buffer on either side of Moots Creek.

| Туре | Ground<br>Disturbing | Computed | Actual |
|------|----------------------|----------|--------|

#### Narrative:

Riparian herbaceous cover consist of grasses, grass-like plants, and forbs comprising the ecosystems along riparian areas of water courses or at the fringe of water bodies. This provides 50' of additional buffer on Godfrey Bay.

| Туре  | Ground<br>Disturbing | Computed      | Actual        |
|-------|----------------------|---------------|---------------|
| Fence | No                   | 1,948.11 feet | 1,948.11 feet |

#### Narrative:

Construct a fence for use as a barrier to livestock. This fence will run along the western side of Moots Creek with a 35' buffer then along GodFrey Bay north with an additional 50' of buffer from the existing 20' historic buffer.

| Туре  | Ground<br>Disturbing | Computed      | Actual        |
|-------|----------------------|---------------|---------------|
| Fence | No                   | 1,957.41 feet | 1,957.41 feet |

#### Narrative:

Construct a fence for use as a barrier to livestock. This fence will run along the eastern side of Moots Creek with a 35' buffer then along GodFrey Bay south with an additional 50' of buffer from the existing 20' historic buffer.

| Туре                  | Ground<br>Disturbing | Computed   | Actual     |
|-----------------------|----------------------|------------|------------|
| Stream Crossing (578) | Yes                  | 71.72 feet | 71.72 feet |

#### Narrative:

Trail or travel way constructed across a stream for livestock.

| Туре     | Ground<br>Disturbing | Computed      | Actual        |
|----------|----------------------|---------------|---------------|
| Pipeline | Yes                  | 1,506.72 feet | 1,506.72 feet |

#### Narrative:

Install a pipeline to convey water from supply source to points of use.

| Туре       | Ground<br>Disturbing | Computed | Actual  |  |
|------------|----------------------|----------|---------|--|
| Water Well | Yes                  | n/a n/a  | n/a n/a |  |

#### Narrative:

Install a well. Well was sited close to the road for easy access to power.

| Туре              | Ground<br>Disturbing | Computed | Actual  |
|-------------------|----------------------|----------|---------|
| Watering Facility | Yes                  | n/a n/a  | n/a n/a |

#### Narrative:

Install a water drinking facility for livestock. This is one of two troughs installed, connected by a single pipeline.

| Туре              | Ground<br>Disturbing | Computed | Actual  |
|-------------------|----------------------|----------|---------|
| Watering Facility | Yes                  | n/a n/a  | n/a n/a |

#### Narrative:

Install a water drinking facility for livestock and/or wildlife. This is the second of two troughs installed, connected by a single pipeline.

## LandUnits (4)

| LandUnit ID | Name    | Туре                     | <b>Calculated Acres</b> | <b>Actual Acres</b> |
|-------------|---------|--------------------------|-------------------------|---------------------|
| 2           | Field 2 | Cropland/Specialty Crops | 3.34                    | 3.4                 |
| LandUnit ID | Name    | Туре                     | Calculated Acres        | Actual Acres        |
| 3           | Field 3 | Cropland/Specialty Crops | 3.87                    | 3.9                 |
| LandUnit ID | Name    | Туре                     | Calculated Acres        | Actual Acres        |
| 1           | Field 1 | Cropland/Specialty Crops | 11.69                   | 11.7                |
| LandUnit ID | Name    | Туре                     | Calculated Acres        | Actual Acres        |
|             |         | - 71                     |                         |                     |

## Plan Features (2)

| Name            | Туре             | Description   |
|-----------------|------------------|---|
| Moot Creek      | Perennial Stream | Perennial Stream which bisects pasture field.   |
| Existing Buffer | Historic Buffer  | This buffer was established in 1970. Average buffer width is only 20' so additional buffer will need to be established. |

## **Practice Schedule**

| List of           | Month/year of  | Required       | Producer agrees                             | Potential    |
|-------------------|----------------|----------------|---|--------------|
| Recommended       | implementation | Y/N            | to implement                                | Funding      |
| BMPs              |                | Reason (select | Y/N   | Sources      |
|                   |                | from dropdown  | If not all recommended land units, indicate | (select from |
|                   |                | list)          | agreed-upon land units.                     | dropdown     |
|                   |                |                |   | list)        |
| SL8-B Small Grain | 10/2017        | No             | Yes   | VACS Cost-   |
| Cover Crop        |                |                |   | Share        |
| SL-6 Stream       | 8/2017         | No             | Yes   | VACS Cost-   |
| Exclusion         |                |                |   | Share        |
|                   |                |                |   |              |
|                   |                |                |   |              |

## Approval Signatures/Date

Owner/Operator Statement: I certify that I am the Owner/Operator of the included land units and am the responsible individual to be requesting this Conservation Plan. I will work towards installing the BMPs agreed to above.

I have read and understand this Conservation Plan and certify the information subitted to the best of my

| knowledge as true, accurate, and con             | iplete.  |  |
|--|--|--|
| Owner/Operator Name                              | Date   |  |
| Plan Writer Statement: I certify that judgement. | the Conservation Plan is true and correct in my professional |  |
| Plan Writer                                      | Date   |  |
| District Board Chair (if required)               | Date   |  |

## **Attached Maps**

Required: Proposed BMPs, topographical, aerial, soils

Optional: Location, VDOT, Hydrology, Existing Practices, Digitized Streams, Resource Concerns

**Supporting documents:** The module allows for uploading of maps from desktop software. Other supporting documents could include Nutrient Management Plan, Forestry Plan, Erosion Calculations, Pest Management, Photos, Environmental Evaluations, Grazing/Pasture Plans, Crop rotation plan, Cost Estimates (received by the producer/owner)